

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,555	07/16/2003	Zeenat Jetha	188821-368917	5946
27155	7590 11/20/2006		EXAMINER	
MCCARTHY TETRAULT LLP BOX 48, SUITE 4700,			TERMANINI, SAMIR	
•	66WELLINGTON STREET WEST		ART UNIT	PAPER NUMBER
	ON M5K 1E6		2178	
CANADA			DATE MAILED: 11/20/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
·	10/619,555	JETHA ET AL.			
Office Action Summary	Examiner	Art Unit			
•	Samir Termanini	2178			
The MAILING DATE of this communication ap	ppears on the cover sheet with the c	correspondence address			
Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPI WHICHEVER IS LONGER, FROM THE MAILING [ - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the maili earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION  .136(a). In no event, however, may a reply be tind  d will apply and will expire SIX (6) MONTHS from te, cause the application to become AB ANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status		•			
1) Responsive to communication(s) filed on 7/1	<u>6/2003</u> .				
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ Th	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.				
•	··				
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.			
Disposition of Claims	,				
4)⊠ Claim(s) <u>1-33</u> is/are pending in the applicatio	n.				
4a) Of the above claim(s) is/are withdra		•			
5) Claim(s) is/are allowed.	•	·			
6)⊠ Claim(s) <u>1-33</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/	or election requirement.				
Application Papers					
9) The specification is objected to by the Examir	ner.				
10)⊠ The drawing(s) filed on 16 July 2003 is/are: a		by the Examiner.			
Applicant may not request that any objection to the	e drawing(s) be held in abeyance. Se	e 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the corre					
11) The oath or declaration is objected to by the E	Examiner. Note the attached Office	e Action or form PTO-152.			
Priority under 35 U.S.C. § 119		•			
12)⊠ Acknowledgment is made of a claim for foreig a)⊠ All b)□ Some * c)□ None of:	n priority under 35 U.S.C. § 119(a	)-(d) or (f).			
1.⊠ Certified copies of the priority documer	nts have been received.				
2. Certified copies of the priority documer	•	ion No			
3. Copies of the certified copies of the pri					
application from the International Bure	au (PCT Rule 17.2(a)).				
* See the attached detailed Office action for a lis	st of the certified copies not receive	ed.			
	•				
Attachment(s)					
1) Notice of References Cited (PTO-892)	4) Interview Summary				
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO/SB/08)</li> </ul>	Paper No(s)/Mail D 5) Notice of Informal F				
Paper No(s)/Mail Date <u>11/12/2003 and 2/2/2004</u> .	6) .Other:				

Application/Control Number: 10/619,555

Art Unit: 2178

#### DETAILED ACTION

- 1. This action is responsive to communications: Application filed on 7/16/2003; and IDS filed on 11/12/2003 and 2/2/2004.
  - 2. Claims 1-33 are pending. Claims 1 and 25 are in independent form.
- 3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)·(d) on 7/16/2003, which papers have been placed of record in the file.

## Claim Rejections · 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 5. Claims 1-2, 11-20, and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by *Nelson et al.* (US 2003/0179237 A1).

As to independent claim 1, *Nelson et al.* teach a method for positioning ("Users may explicitly manipulate the objects and manipulations persist within the virtual environment..." para. [0006]) a selected object in a computer generated original image on a display (e.g. "...select one object..." para. [0077]), comprising the steps of distorting said original image to produce a distorted region for said object ("fisheye" para [0051]); dragging said object and said distorted region to a desired position ("draggable" para [0118]); and,

dropping said object at said desired position ("paste" para. [0051]), whereby said object is accurately positioned ("can be dropped and avoids overlap by automatically moving " para. [0005]).

As to dependent claim 2, *Nelson et al.* further teach the method of claim 1, wherein said step of distorting further includes the steps of creating a lens surface for said distorted region (e.g. "...the creation of irregular, non-uniform edges on a displayed object." para. [0053]); and, transforming said original image by applying a distortion function defining said lens surface to said original image ("fisheye" para. [0051]).

As to dependent claim 11 and 12, *Nelson et al.* further teach the method of claim 1, wherein the distorted region ("fisheye" para. [0051]) is either on the object ("...formed by clipping the object along a geometric path and applying transformation such as edge detection..." para. [0054]) or that the distorted region overlaps the object ("transformation such as rectangular distortion... on the displayable portion of the folded object..." para. [0069]).

As to dependent claim 13, *Nelson et al.* further teach the method of claim 1, wherein the object is a selection from said original image ("an 'object' is defined as [an] image... displayed" para. [0037]).

As to dependent claims 14-16, and 22 *Nelson et al.* further teach that the object can either be an icon ("an "object" is defined as a window, icon, image, or any other viewable image which may be displayed." para. [0037]) text selection ("to manipulate text" para. [0002]) or from an external source other than said original image ("network updates on a displayed object" para. [0048]).

As to dependent claims 17-18, *Nelson et al.* further teach that the dragging includes the step of cutting said object from said original image ("dragging a mouse or other pointing input device along a path, clicking a path or other pointing input device at predefined or user-selected cut points," para. [0055]; also "Clipping is applied to objects based on dynamic user input or other dynamic processes" para. [0048]) and dropping further includes the step of pasting said object into said original image ("paste" para. [0051]).

As to dependent claims 19 and 20, *Nelson et al.* further teach a that the display is a touchscreen display ("touch sensitive screen" para. [0002]) of a photograph processing workstation ("PhotoShop" para. [0049]) as a kiosk (Fig. 7).

## Claim Rejections · 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claim 3-4 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Nelson et al.* (US 2003/0179237 A1) in view of *Dürsteler*, The digital magazine of InfoVis.net, published 4/22/2002, (hereinafter "*Dürsteler*").

As to dependent claim 3, *Nelson et al.* teach the dragging and dropping as discussed with respect to claim 2, above. *Nelson et al.* does not show the step of creating to include displaying a graphical user interface over the a distorted region for adjusting a lens surface. *Dürsteler* teaches the step of displaying a graphical user interface over a distorted region for adjusting a lens surface (Fig. toward bottom on pp. 1; *see also*, pp. 1, first set of 4 Figs

mid-page). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have adjusted the lens surface by a displaying a graphical user interface over a distorted region because, Nelson et al. is directed toward the same field of endeavor of Dürsteler, to wit, "display information within a confined display area" (Nelson et al., para. [0002]) so that one can "view, manipulate, and otherwise manage information" (Nelson et al., para. [0002]). Furthermore, to the same particular problem sought be solved, ("According to another aspect, the invention comprises a graphical user interface ("GUI") which includes a graphical display surface, and a graphical object, displayable on the graphical display surface [i.e. lens], wherein the graphical object may be manipulated in a non uniform manner." para. [0014]). Still further, Dürsteler expressly suggests that it is desirable to use its interface with layers ("...tomake appear new information layers depending on the magnification at a particular point..." pp. 1) as reciprocated in Nelson et al. ("...objects may be attached at a corner, at a point along the edge, at an interior point, at multiple points, continuously along an edge, throughout a specified region, any combination of the above, or across the entire object... if an object is attached at one corner, lifting, folding, etc. may occur at the far corners of the object." para. [0088] [0089]).

As to dependent claim 4, *Nelson et al.* and *Dürsteler* teach the limitations of claim 3, above. However, *Nelson et al.* does not show that the lens surface includes a focal region and base region where said GUI includes: a slide bar icon for adjusting a magnification for said lens surface; a slide bar icon for adjusting a degree of scooping for said lens surface; a bounding rectangle icon with at least one handle icon for adjusting a size and a shape for said focal region; a bounding rectangle icon with at least one handle icon for adjusting a size and a shape for said base region; a move icon for adjusting a location for said lens

surface within said original image; a pickup icon for adjusting a location for said base region within said original image; and, a fold icon for adjusting a location for said focal region relative to said base region. Dürsteler further teaches that the lens surface includes a focal region (pp. 1, see Figure towards bottom) and a base region (pp. 1, Figure towards bottom) and said GUI includes: a slide bar icon for adjusting a magnification for said lens surface (pp. 1, Figure towards bottom); a slide bar icon for adjusting a degree of scooping for said lens surface (pp. 1, Figure towards bottom); a bounding rectangle icon with at least one handle icon for adjusting a size and a shape for said focal region (pp. 1, see Figure towards bottom); a bounding rectangle icon with at least one handle icon for adjusting a size and a shape for said base region (pp. 1, Figure towards bottom); a move icon for adjusting a location for said lens surface within said original image (pp. 1, see Figure towards bottom); a pickup icon for adjusting a location for said base region within said original image (pp. 1, see Figure towards bottom); and, a fold icon for adjusting a location for said focal region relative to said base region (pp. 1, Figure towards bottom). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used the GUI shown in Nelson et al. with Dürsteler because, Nelson et al., inter alia, teach various ways to interact through an attached distorted region for affecting context sensitive direct manipulations ("Attachment of display objects in a GUI according to an embodiment of the present invention may happen in a variety of ways. Where a display object gets attached determines the kinds of direct manipulation that may most easily be applied to the object" para. [0088]). Additionally, Nelson et al. show that such iconic manipulations are an expected benefit of Dürsteler's digital system ("A common characteristic of typical GUI's is the implicit design assumption of arranging display elements windows, panes inwindow,

Application/Control Number: 10/619,555

Art Unit: 2178

objects in panes, icons, etc. with a regularity that is easily accomplished in a digital system." para. [0003]).

As to dependent claims 8 ·10, Nelson et al. in view of Dürsteler teach the limitations of claim 4, above. However, Nelson et al. does not show that the dragging, dropping, and adjusting are performed by moving a cursor on said display with a pointing device.

Dürsteler further teaches that the dragging, dropping, and adjusting are performed by moving a cursor on said display with a pointing device (editing and image pp. 1, see also mouse cursor icon, pp. 1 Figure towards bottom). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used the GUI shown in Nelson et al. with Dürsteler because, in the same field of endeavor, Nelson et al. teaches the use of a mouse ("Current GUIs typically utilize some type of a control device, such as a mouse, or touch sensitive screen, to manipulate text, images, and other objects on a display screen. These objects may include icons, windows, menus, and other images which are frequently displayed through the use of computer programs." para. [0002]) being used in the same way for the same purpose ("by direct manipulation...e.g., drag and drop..." para. [0094]).

8. Claims 5·7, 21, and 23·34 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Nelson et al.* in view of *Dürsteler* and as applied to claim 4 above, and further in view of Idelix Software Inc. Presentation for CGDI Workshop May 2002 ("*CGDI*").

As to dependent claims 5-7, and 21, *Nelson et al.* in view of *Dürsteler* teach the limitations of claim 4, set forth above. However, *Nelson et al.* in view of *Dürsteler* fails to show that the GUI further includes an attached toolbar including function selection icons,

function status icons, and an icon representing said object. *CGDI* is cited for teaching the that the GUI further includes an attached toolbar (see toolbar pp. 12) including function selection icons (e.g. arrow, pp. 12, 14, and 15), function status icons (e.g. indented icons indicating status, pp. 12; see also bottom and layer icons, pp. 12, 14, and 15), and an icon representing said object (e.g. see object icon pp. 12, 14, and 15). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used the attached toolbar including function selection icons with *Nelson et al.* in view of *Dürsteler* because *CGDI* expressly teaches the advantages in combining *Nelson et al.* and *Dürsteler*, and the "In-place lens user interface" of *CGDI* for the advantage of efficiency in view of the fact that it "Decreases zoom in and zoom out operations, Efficient way to locate and edit information" (*CGDI*, pp. 13) and further to "Improve visual data exploration interface, Enhance current viewing capabilities" (*CGDI*, pp. 4) so that there is "No loss of detail or context, Visually continuous, Easy to follow, All in one window, Intuitive to use" (*CGDI*, pp. 10).

As to dependent claims 23 and 24, *Dürsteler* further teaches a toolbars that are translucent and transparent that allowing observation of said original image through said toolbar (see magnify tool bar, containing two function icons, on the right hand side, pp. 1 Figure towards bottom). Thus, the combination of *Dürsteler*, *Nelson et al.*, and *CGDI*, meet the claimed limitations for the same reasons set forth in the discussion of claim 5 above.

9. Claims 25-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Idelix Software Inc. Presentation for CGDI Workshop May 2002 ("CGDI") in view of Dürsteler, The digital magazine of InfoVis.net, published 4/22/2002, ("Dürsteler").

As to independent claim 25, CGDI teaches a method for manipulating a presentation of a region of interest within visual information on a display screen of a computer (editing, pp. 12), said region of interest including a focal region and a base region (inner and outer squares, pp. 12), said method comprising the steps of displaying a toolbar over said region of interest for selecting at least one parameter for transforming at least one of said region of interest (see toolbar above, pp. 12, 14, and 15), said focal region (see toolbar above, pp. 12, 14, and 15), and said base region (see toolbar above, pp. 12, 14, and 15); transforming said visual information in accordance with a predetermined distortion function and said at least one parameter to produce transformed visual information; and, displaying said transformed visual information on said display screen (e.g. pp. 12, 14, and 15). CGDI does not show selecting said at least one parameter from said toolbar with a pointing device. Dürsteler, teaches selecting said at least one parameter from said toolbar with a pointing device (mouse pointer icon for selecting parameters, pp. 1, see Figuretowards bottom). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used the mouse pointer shown in Dürsteler with CGDI because both are directed toward identical Pliable Display Technology, being deployed in identical ways, for accomplishing identical objects, of identical problems.

As to dependent claim 26, CGDI teaches the limitations of claim 25, further comprising at least one parameter includes a shape for said focal region (pp.14) and a shape for said base region (pp.14). CGDI does not show that least one parameter includes: a magnification for said region of interest; a size for said focal region; a size for said base region; a degree of scooping between said focal and base regions a location for said region of interest within said visual information; and a location for said focal region relative to

said base region a location for said base region within said visual information. *Dürsteler* teaches at least one parameter includes: a magnification for said region of interest (magnify pp. 1, see figure towards bottom); a size for said focal region (resize focal region pp. 1, see figure towards bottom); a size for said base region (resize base, pp. 1, see figure towards bottom); a degree of scooping between said focal and base regions ("adjust lens scoop," pp. 1, see Figure towards bottom) a location for said region of interest within said visual information ("move lens", pp. 1, see Figure towards bottom); a location for said focal region relative to said base region (resize focal, pp. 1, see Figure towards bottom) a location for said base region within said visual information (pp. 1, see Figure towards bottom). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used the mouse pointer shown in *Dürsteler* with *CGDI* because both are directed toward identical Pliable Display Technology, being deployed in identical ways, for accomplishing identical objects, of identical problems.

As to dependent claim 27, *CGDI* further teaches that said toolbar includes at least one lens icon for selecting said at least one parameter (three lens icons on the toolbar and one lens layer radio, pp. 14).

As to dependent claim 28, *CGDI* further teaches that least one lens icon represents said transformed visual information (pp. 14).

As to dependent claim 29, *CGDI* further teaches that at least one lens icon includes a pyramidal (2<sup>nd</sup> from left pp. 14) lens icon, a circular based lens icon(3<sup>rd</sup> from left, pp. 14), and a circular focused lens icon (4<sup>th</sup> from left, pp. 14).

As to dependent claim 30, *CGDI* further that the toolbar includes: a pointer icon for selecting points in said visual information (5<sup>th</sup> from left, pp. 14); a hand tool icon for

selecting a view area in said visual information (6th from left, pp. 14); a zoom tool icon for zooming into or away from said region of interest (7th from left, pp. 14); a measuring tool icon for initiating a measurement function (8th from left, pp. 14); a help tool icon for initiating a user help function (9th from left, pp. 14); a continuation arrow icon for indicating and scrolling additional toolbar icons into view (10th from left, pp. 14); a delete icon for deleting said presentation from said transformed visual information (1st from left, pp. 14); a printer icon for selecting and indicating a status of a print function (13th from left, pp. 14); a floppy disk icon for selecting and indicating a status of a save function (3rd from left, pp. 15); a redo icon for selecting a redo function (12th from left, pp. 14); an undo icon for selecting an undo function (11th from left, pp. 14); a resize base icon for selecting a predefined base region resizing function; and, a resize focus icon for selecting a predefined focal region resizing function (pp. 14 and 15).

As to dependent claim 31, CGDI further teaches that the toolbar is a horizontal toolbar (pp. 12, 14, and 15).

As to dependent claims 32, *CGDI* teaches the limitations of claim 30 but does not show that the toolbar is a vertical toolbar. *Dürsteler* teaches a vertical tool bar (magnify + and magnify ·, pp. 1, see Figure towards bottom). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used the vertical toolbar in *Dürsteler* with *CGDI* because both are directed toward identical Pliable Display Technology, being deployed in identical ways, for accomplishing identical objects, of identical problems.

As to dependent claims 33. *CGDI* further teaches toolbars distributed over boundaries of the base and focal regions (scoop toolbar and magnify toolbar, 12, 14, and 15).

Application/Control Number: 10/619,555

Art Unit: 2178

Page 12

### Conclusion

- 10. Although not relied upon, the following prior art made of record is considered pertinent to applicant's disclosure:
  - [1] Yeomans (US 4,800,379) an Image display with movable magnification.
  - [2] Ohba (US 4,885,702) for teaching a method of forming curved surfaces and the apparatus.
  - [3] Bier et al. (US 5,581,670) a user interface having movable sheet with click-through tools.
  - [4] Stone at al. (US 5,596,690) for teaching a method and apparatus for operating on an object based model data structure to produce a second image in the spatial context of a first image.
  - [5] Mullet et al. (US 5,638,523) a method and apparatus for browsing information in a computer database.
  - [6] Stone et al. (US 5,652,851) for teaching a user interface technique for producing a second image in the spatial context of a first image using a model-based operation.
  - [7] Robertson et al. (US 5,670,984) for teaching a image Lens.
  - [8] *Mackinlay* (US 5,689,287) for teaching a context-preserving display system using a perspective sheet.
  - [9] Buxton (US 5,798,752) for teaching a user interface having simultaneously movable tools and cursor.
  - [10] Stone et al. (US 5,818,455) for teaching a method and apparatus for operating on the model data structure of an image to produce human perceptible output using a viewing operation region having explicit multiple regions.
  - [11] Sciammarella (US 6,052,110) for teaching a dynamic control of zoom operation in computer graphics.
  - [12] Crosby et al. (US 6,577,311 B1) for teaching techniques for automatically providing a high-resolution rendering of a low resolution digital image in a distributed network.

- [13] Sarfeld US (US 6,633,305 B1) for teaching a system and method for magnifying and editing images.
- [14] Schmalstieg et al. (US 6,842,175 B1) for teaching tools for interacting with virtual environments.
- 11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samir Termanini whose telephone number is (571) 270-1047. The examiner can normally be reached from 9 A.M. to 4 P.M., Monday through Friday (excluding alternating Fridays).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen S. Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Samir Termanini

Patent Examiner Art Unit 2178

STEPHEN BONG